

FILE-ALLOCATE

File	9
Op-Sys	OS/390, VSE/ESA, BS2000/OSD
Statement	PROCESS
Task	Enables the allocation of files from a Natural session.

Common Fields for all Operating Systems

Dictionary Field Name	F/L	Mu	DE	Remarks
ERROR-CODE	N3			
ERROR-TEXT	A58			
NODE	N3		D	
NODE-NAME	A16		D	
SYSTEM-MESSAGE-CODE	A10			
DSNAME	A54		D	Required.
VOLSER	A6		D	Required in VSE/ESA. VOLSER or UNIT is required in OS/390.
DSORG	A4		D	
UNIT	A8		D	VOLSER or UNIT is required in OS/390. (Not for VSE/ESA).

Additional Fields Supported for OS/390

Dictionary Field Name	F/L	Mu	DE	Remarks
EXPIRATION-DATE	A8		D	
EXPIRATION-DATX	D		D	
RECFM	A4		D	Required.
LRECL	N5		D	Required.
BLKSIZE	N5		D	Required.
ALLOCATION-TYPE	A3		D	Required.
PRIMARY-ALLOCATION	N7		D	Required.
SECONDARY-ALLOCATION	N7		D	Required.
DISP	A3		D	
DIRECTORY-BLOCKS	N7		D	Required for PO-type datasets (see DSORG field).
CATALOG	A3		D	
RLSE	A3		D	
CONTIG	A3		D	
ROUND	A3		D	
EXTENDED-TEXT	A250	M/3	D	
VOLUME-COUNT	N2		D	Required if writing multiple reels
VOLUME-SEQUENCE	N2		D	
DENSITY	A1		D	
LABEL	A4		D	
DDNAME	A8		D	
FREE	A3		D	
SMS-STORAGE-CLASS	A8		D	
SMS-MANAGEMENT-CLASS	A8		D	
SMS-DATA-CLASS	A8		D	

Additional Fields Supported for VSE/ESA

Dictionary Field Name	F/L	Mu	DE	Remarks
EXPIRATION-DATE	A8		D	
EXPIRATION-DATX	D		D	
EXTENT-START	N10		D	
EXTENT-SIZE	N10		D	Required.

Additional Fields Supported for BS2000/OSD

Dictionary Field Name	F/L	Mu	DE	Remarks
SYSTEM-CODE	B2			
RECFM	A4		D	
LRECL	N5		D	
BLKSIZE	N5		D	
ALLOCATION-TYPE	A4		D	
PRIMARY-ALLOCATION	N7		D	
SECONDARY-ALLOCATION	N7		D	
LABEL	A4		D	
SHARE	A3		D	
ISAM-KEY-POSITION	N5		D	
ISAM-KEY-LENGTH	N5		D	
REPLACE	A3		D	
STANDARD-BLOCKS	A3		D	
BLOCK-CONTROL	A6		D	
PASSWORD	A8		D	
PRODUCT	A1		D	
VOLSER-ARRAY	A6	M / 5	D	

Relevant Error Codes

Code	Text	OS/390	VSE/ESA	BS2000/OSD
530	Access denied by Security Facility.	X		X
531	Password missing or incorrect.			X
556	File is in use.			X
565	Syntax error in dataset name.			X
658	Dataset is not cataloged.			X
659	Dataset is already cataloged.			X
694	Strange error opening VTOC.		X	
695	VTOC is in use.		X	
696	Cannot assign logical unit.		X	
699	GETVIS storage request failed.		X	
700	Invalid value specified (DSORG/RECFM/TYPE).			X
701	DSNAME missing.	X	X	X
710	Allocation failed. Reason=TAPES NOT ALLOWED.	X	X	X
733	User ID does not exist.			X
799	Entire System Server internal error.			X
853	Retention cycle unexpired / NEWNAME exists.			X
878	Volume defined as DYNAM/D pool name.		X	
899	I/O error reading VTOC.		X	
981	Invalid value specified (BLKCTRL/BLKSIZE/LRECL).			X
991	Unknown product.			X
993	Cannot open file.			X
994	File not on volume.		X	
996	Volume not online.		X	

Field Descriptions

Field Name	Type/Length	Operating System
ALLOCATION-TYPE	(A4)	OS/390, BS2000/OSD

Space allocation type. Possible values:

OS/390 and VSE/ESA	BS2000/OSD
BLK = Block CYL = Cylinder. TRK = Tracks (default)	NSTD = Non-standard blocks (tape files) PAM = PAM pages (default)

Field Name	Type/Length	Operating System
BLKSIZE	(N5)	OS/390, BS2000/OSD

OS/390	BS2000/OSD
Block size. The default is 0.	Number of PAM pages for a block if the field ALLOCATION-TYPE is PAM. The default is 1.

For non-STD blocks, block size in bytes (only valid for tape files).

Field Name	Type/Length	Operating System
BLOCK-CONTROL	(A6)	BS2000/OSD

Block control type for this file (depending on disk type K or NK). Possible options:

Option	Explanation
DATA	PAM key information in data (NK disks only)
NO	No PAM key information (NK disks only)
PAMKEY	Default. PAM key separate from data.

Field Name	Type/Length	Operating System
CATALOG	(A3)	OS/390

Specifies whether and how the dataset is cataloged. Possible options:

Option	Explanation
NO	Default. Dataset is not cataloged.
YES	Dataset is cataloged. If you specify generation dataset name (DATASET(+1)), the dataset is always cataloged. The dataset must already have been cataloged (see the view CATALOG-UPDATE, especially the field NUMBER-OF-GENERATIONS).

Field Name	Type/Length	Operating System
CONTIG	(A3)	OS/390

Specifies contiguous allocated space. Possible options:

Option	Explanation
NO	Default. Space is not allocated contiguously.
YES	Space is allocated contiguously.

Field Name	Type/Length	Operating System
DDNAME	(A8)	OS/390

Internal DD name used by the Entire System Server. It must be specified on calls to READ-FILE and WRITE-FILE when allocating tape units.

Field Name	Type/Length	Operating System
DENSITY	(A1)	OS/390

Tape density. Possible options:

Option	Explanation
3	1600 BPI
4	6250 BPI

Field Name	Type/Length	Operating System
DIRECTORY-BLOCKS	(N7)	OS/390

Number of directory blocks for PDS.

Field Name	Type/Length	Operating System
DISP	(A3)	OS/390

Disposition of the dataset. Possible values:

Value	Explanation
MOD	Modify: overwrite existing dataset.
NEW	New dataset.
OLD	Dataset already exists.
SHR	Shared dataset: other users have access.

Field Name	Type/Length	Operating System
DSNAME	(A54)	OS/390, VSE/ESA, BS2000/OSD

Fully qualified dataset name. For BS2000/OSD, fully qualified file name.

Field Name	Type/Length	Operating System
DSORG	(A4)	OS/390, VSE/ESA, BS2000/OSD

Dataset organization. Possible options:

OS/390	VSE/ESA	BS2000/OSD	
PO = Partitioned dataset (PDS). PS = Default. Sequential dataset.	PS = Default. Sequential dataset.	ISAM	Default. Indexed Sequential Access Method.
		PAM	Block oriented file organization handled by User Primary Access Method (UPAM).
		PLAM	Program Library Access Method for LMS Libraries.
		SAM	Sequential Access Method.

Field Name	Type/Length	Operating System
EXPIRATION-DATE	(A8)	OS/390, VSE/ESA

Expiration date in the format YYDDD or YYYYDDD. If EXPIRATION-DATE is specified with format YYDDD, it will be converted to the YYYY/DDD format using a fixed window from 1964 to 2063. For OS/390 and VSE/ESA, there is no default (i.e., no expiration date). For BS2000/OSD, the default is the current date.

Field Name	Type/Length	Operating System
EXPIRATION-DATX	(D)	OS/390, VSE/ESA

Expiration date in internal format.

Field Name	Type/Length	Operating System
EXTENDED-TEXT	(A250)	OS/390

Text lines (up to 3) containing error description.

Field Name	Type/Length	Operating System
EXTENT-SIZE	(N10)	VSE/ESA

Size of the extent.

Field Name	Type/Length	Operating System
EXTENT-START	(N10)	VSE/ESA

Defines start of extent. For FBA, it is the block number. For CHD, it is the track number.

Field Name	Type/Length	Operating System
FREE	(A3)	OS/390

Specify YES to free the allocation for DDNAME.

Field Name	Type/Length	Operating System
ISAM-KEY-LENGTH	(N5)	BS2000/OSD

Gives the key length. Default is 8, maximum value is 253.

Field Name	Type/Length	Operating System
ISAM-KEY-POSITION	(N5)	BS2000/OSD

Gives the position of the first byte of the key within the record.
Default: **5** for RECFM=V, **1** for RECFM=F.

Field Name	Type/Length	Operating System
LABEL	(A4)	OS/390, BS2000/OSD

Type of label processing.

Field Name	Type/Length	Operating System
LRECL	(N5)	OS/390, BS2000/OSD

Logical record length. The default is 0.

Field Name	Type/Length	Operating System
PASSWORD	(A8)	BS2000/OSD

Password for write access, if existing file must be replaced.

Field Name	Type/Length	Operating System
PRIMARY-ALLOCATION	(N7)	OS/390, BS2000/OSD

- OS/390: Primary space allocation (default is 0).
- BS2000/OSD: Number of PAM pages for primary allocation (default is system default).

Field Name	Type/Length	Operating System
PRODUCT	(A1)	BS2000/OSD

Access method used. Possible options:

- M = LMS (BS2000/OSD)
- ' ' = default

Provide the following fields to create an LMS PLAM library:

Example:

```
FIND FILE-ALLOCATE WITH NODE = node
  AND DSNAME = 'dsname'
  AND DSORG = 'PLAM'
  AND PRODUCT = 'M'
  AND REPLACE = 'NO'
  . . .
```


Field Name	Type/Length	Operating System
RECFM	(A4)	OS/390, BS2000/OSD

Record format. For OS/390, the default is FB. For BS2000/OSD, the default is V,N.

Field Name	Type/Length	Operating System
REPLACE	(A3)	BS2000/OSD

Specifies whether file with the same name is to be overwritten. Possible options:

Option	Explanation
NO	Default. Allocate only if file does not exist.
YES	Overwrite existing file.

The Value YES is not possible for PLAM libraries.

Field Name	Type/Length	Operating System
RLSE	(A3)	OS/390

Specifies whether unused space is released after the dataset is closed. Possible options:

Option	Explanation
NO	Default. Unused space is not released.
YES	Unused space is released after dataset is closed.

Field Name	Type/Length	Operating System
ROUND	(A3)	OS/390

Specifies whether one or more whole cylinders are to be allocated. Possible options:

Option	Explanation
NO	Default. Allocated space need not be whole cylinders.
YES	Allocate one or more whole cylinders.

Field Name	Type/Length	Operating System
SECONDARY-ALLOCATION	(N7)	OS/390, BS2000/OSD

- OS/390: Secondary space allocation (default is 0).
- BS2000/OSD: Number of PAM pages for secondary allocation (default is system default).

Field Name	Type/Length	Operating System
SHARE	(A3)	BS2000/OSD

Defines whether a file can be shared. Possible options:

Option	Explanation
NO	Default. File cannot be shared.
YES	File can be shared.

Field Name	Type/Length	Operating System
SMS-DATA-CLASS	(A8)	OS/390

Data class of SMS managed file.

Field Name	Type/Length	Operating System
SMS-MANAGEMENT-CLASS	(A8)	OS/390

Management class of SMS managed file.

Field Name	Type/Length	Operating System
SMS-STORAGE-CLASS	(A8)	OS/390

Storage class of SMS managed file.

Field Name	Type/Length	Operating System
STANDARD-BLOCKS	(A3)	BS2000/OSD

Possible options:

Option	Explanation
YES	Default. Blocksize is multiple of a PAM page (STD,n).
NO	Non-standard blocks (only valid for tape files).

See also field BLKSIZE.

This field will be deleted in the next version of the Entire System Server. Use field ALLOCATION-TYPE instead.

Field Name	Type/Length	Operating System
UNIT	(A8)	OS/390, BS2000/OSD

Generic unit name on which the dataset is to be allocated, for example, SYSDA. For BS2000/OSD, this field is relevant only for tape files.

Field Name	Type/Length	Operating System
VOLSER	(A6)	OS/390, VSE/ESA, BS2000/OSD

Volume serial number where the file is to be located. In BS2000/OSD, for multi-volume tape files, use the field VOLSER-ARRAY.

Field Name	Type/Length	Operating System
VOLSER-ARRAY	(A6) M5	BS2000/OSD

For multi-volume tape file: list of maximum 5 volumes.

Field Name	Type/Length	Operating System
VOLUME-COUNT	(N2)	OS/390

Maximum number of output volumes to be allocated. Required if writing multiple reels.

Field Name	Type/Length	Operating System
VOLUME-SEQUENCE	(N2)	OS/390

When a tape dataset is cataloged, you can supply a value of greater than 1 if processing is not the start with the first reel.